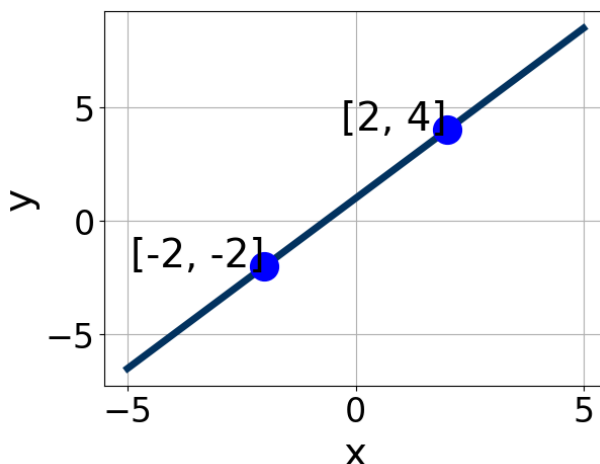


1. First, find the equation of the line containing the two points below. Then, write the equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

$(6, -9)$  and  $(4, 3)$

- A.  $m \in [-6, -2]$   $b \in [-16, -9]$   
B.  $m \in [-6, -2]$   $b \in [-2, 1]$   
C.  $m \in [-6, -2]$   $b \in [-29, -22]$   
D.  $m \in [-6, -2]$   $b \in [24, 31]$   
E.  $m \in [2, 10]$   $b \in [-25, -20]$
- 

2. Write the equation of the line in the graph below in Standard Form  $Ax + By = C$ . Then, choose the intervals that contain  $A$ ,  $B$ , and  $C$ .



- A.  $A \in [2.84, 4.64]$ ,  $B \in [-2.32, -1.44]$ , and  $C \in [-2.02, -1.52]$   
B.  $A \in [-4.01, -2.79]$ ,  $B \in [1.7, 2.01]$ , and  $C \in [1.22, 3.88]$   
C.  $A \in [2.84, 4.64]$ ,  $B \in [1.7, 2.01]$ , and  $C \in [1.22, 3.88]$   
D.  $A \in [-2.92, -1.26]$ ,  $B \in [0.95, 1.02]$ , and  $C \in [0.78, 1.69]$   
E.  $A \in [-2.92, -1.26]$ ,  $B \in [-1.83, -0.44]$ , and  $C \in [-1.05, -0.64]$
-

3. Solve the equation below. Then, choose the interval that contains the solution.

$$-10(12x + 9) = -18(-19x + 17)$$

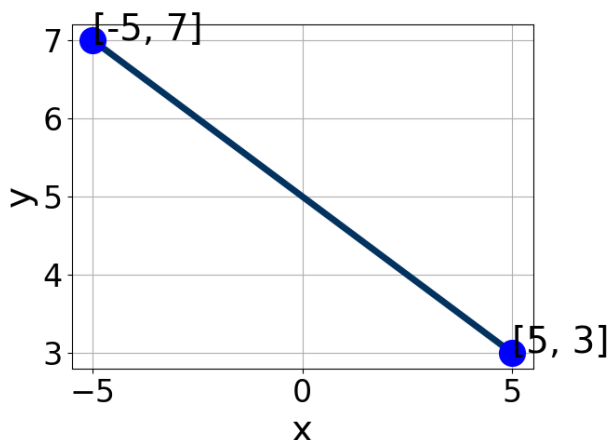
- A.  $x \in [-1.03, -0.42]$
  - B.  $x \in [0.43, 0.78]$
  - C.  $x \in [1.1, 2.23]$
  - D.  $x \in [0.6, 1.61]$
  - E. There are no real solutions.
- 

4. First, find the equation of the line containing the two points below. Then, write the equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

$$(11, -5) \text{ and } (-3, 11)$$

- A.  $m \in [0.14, 4.14]$   $b \in [14.22, 14.87]$
  - B.  $m \in [-3.14, 0.86]$   $b \in [-16.3, -15.83]$
  - C.  $m \in [-3.14, 0.86]$   $b \in [13.94, 14.32]$
  - D.  $m \in [-3.14, 0.86]$   $b \in [-7.96, -7.54]$
  - E.  $m \in [-3.14, 0.86]$   $b \in [7.19, 8.06]$
- 

5. Write the equation of the line in the graph below in Standard Form  $Ax + By = C$ . Then, choose the intervals that contain  $A$ ,  $B$ , and  $C$ .



- A.  $A \in [-1.7, 0.9]$ ,  $B \in [-2.32, -0.17]$ , and  $C \in [-7, -3]$   
 B.  $A \in [1.6, 3.1]$ ,  $B \in [-7.51, -4.95]$ , and  $C \in [-29, -23]$   
 C.  $A \in [-1.7, 0.9]$ ,  $B \in [0.43, 2.07]$ , and  $C \in [1, 12]$   
 D.  $A \in [1.6, 3.1]$ ,  $B \in [4.1, 5.67]$ , and  $C \in [24, 31]$   
 E.  $A \in [-2.6, 0.2]$ ,  $B \in [-7.51, -4.95]$ , and  $C \in [-29, -23]$

6. Solve the equation below. Then, choose the interval that contains the solution.

$$-12(11x - 16) = -8(-14x - 6)$$

- A.  $x \in [-0.09, 0.98]$   
 B.  $x \in [0.87, 0.99]$   
 C.  $x \in [11.94, 12.19]$   
 D.  $x \in [-1.3, -0.55]$   
 E. There are no real solutions.

7. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{4x + 5}{5} - \frac{-3x - 8}{2} = \frac{-7x + 3}{8}$$

- A.  $x \in [-0.38, 0.07]$

- B.  $x \in [-4.29, -2.18]$
  - C.  $x \in [-2.82, -1.42]$
  - D.  $x \in [0.98, 1.57]$
  - E. There are no real solutions.
- 

8. Find the equation of the line described below. Write the linear equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

Perpendicular to  $8x - 9y = 9$  and passing through the point  $(-9, 4)$ .

- A.  $m \in [-1.33, -0.98]$   $b \in [5.49, 6.27]$
  - B.  $m \in [-0.99, -0.73]$   $b \in [-6.39, -4.95]$
  - C.  $m \in [-1.33, -0.98]$   $b \in [12.5, 13.4]$
  - D.  $m \in [0.85, 1.49]$   $b \in [13.67, 14.79]$
  - E.  $m \in [-1.33, -0.98]$   $b \in [-6.39, -4.95]$
- 

9. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{4x + 5}{7} - \frac{8x + 7}{5} = \frac{-3x + 6}{4}$$

- A.  $x \in [-3.19, -1.19]$
  - B.  $x \in [1.21, 3.21]$
  - C.  $x \in [-9.85, -4.85]$
  - D.  $x \in [-30.72, -27.72]$
  - E. There are no real solutions.
- 

10. Find the equation of the line described below. Write the linear equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

Parallel to  $8x - 9y = 15$  and passing through the point  $(4, 9)$ .

- A.  $m \in [0.72, 0.92]$   $b \in [-8.4, -4]$
  - B.  $m \in [1.09, 1.37]$   $b \in [5.2, 5.7]$
  - C.  $m \in [0.72, 0.92]$   $b \in [5.2, 5.7]$
  - D.  $m \in [-0.94, -0.66]$   $b \in [11.2, 13.6]$
  - E.  $m \in [0.72, 0.92]$   $b \in [2.2, 5.3]$
-